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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,406	05/11/2001	Kenneth Shafer	4981*0318	6964

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EXAMINER

LOPEZ, CARLOS N

ART UNIT	PAPER NUMBER
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1731

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DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/853,406

Applicant(s)

SHAHER ET AL.

Examiner

Carlos Lopez

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/19/02.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-12 and 14-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

Applicant's Amendment filed on 11/19/02, obviates the rejection under 35 U.S.C 112, 2<sup>nd</sup> Paragraph of claims 10-12.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1) Claims 10-11 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanford et al (US 3,667,479). Sanford et al determined that smoke constituent is increases/maximized as the cigarette is smoke from the tip end to the butt end (Column 1, and Figure 11). Stanford then applies an inhibitor/attenuator, holes, at 1/3 to 2/3 portion closest to the butt end of the cigarette (Column 1, lines 44-46). As for claims 11, 15-16, the smoke constituents are combustions by-products that include aldehydes such as formaldehyde.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanford et al (US 3,667,479) as applied to claim 10 above, and further in view of Fournier et al (US 6,289,898). Claim 12 additionally recites the inhibitor/attenuator being ammonium bicarbonate. Sanford is silent disclosing inhibitors/attenuators such as ammonium bicarbonate. However, Fournier et al teaches of using ammonium containing compound filler for tobacco wrappers to reduce aldehydes in tobacco smoke (Column 2, lines 25-35). As shown by Fournier et al, ammonium-containing compound are a result effective-variable to reduce aldehyde content of smoke. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to have conducted routine experiments to determine the most effective aldehyde reducing ammonium compound as an obvious optimization of a result-effective variable to reduce aldehyde content of smoke.

### ***Response to Arguments***

Applicant's arguments filed 11/19/02 have been fully considered but they are not persuasive. In page 4 of Applicant's response, it is argued that Sanford simply burns hole and that it can't be equated to Applicant's "inhibitor/attenuator". In view that Applicant's specification does not provide an explicit definition of an "inhibitor/attenuator", its meaning, inter alia, was given the dictionary definition of attenuator<sup>1</sup>. The meaning of "inhibitor/attenuator" was also accorded the recitation in

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<sup>1</sup> **at·ten·u·ate** (e-tèn'yj-ât') *verb*  
**at·ten·u·at·ed, at·ten·u·at·ing, at·ten·u·ates** *verb, transitive*  
1. To make slender, fine, or small.  
2. To reduce in force, value, amount, or degree; weaken.  
3. To lessen the density of; rarefy.  
4. *Biology.* To make (bacteria or viruses) less virulent.  
5. *Electronics.* To reduce (the amplitude of an electrical signal) with little or no distortion.


Applicant's specification, second paragraph of page 2, "introduction of ventilation holes or an increase in permeability in the paper outer wrap". Therefore, Sanford's holes on the cigarette wrapper of a tobacco rod attenuates delivery of smoke constituents (See Column 1, line 54) meets Applicant's definition of "inhibitor/attenuator".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

C.L  
January 27, 2003

  
JAMES DERRINGTON  
PRIMARY EXAMINER  
ART UNIT ~~137~~ 1731

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*verb, intransitive* To become thin, weak, or fine.

*adjective* (-yī-īt)

1. Reduced or weakened, as in strength, value, or virulence.
2. *Botany*. Gradually tapering to a slender point.

[Latin *attenuāre, attenuāt-* : *ad-*, *ad-* + *tenuāre*, to make thin (from *tenuis*, thin).]<sup>1</sup>